Clinical Section

Pollen Disease*

REPORT OF 111 CASES

By

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It is estimated that at least one in every fifty persons on this continent has Hay Fever, and many of these later develop Asthma. Medicine has battled with the serious and fatal diseases with much patience and courage and often with great success. Hay Fever, being non fatal and funny like seasickness has not been of much concern to anyone except the sufferers and the patent medicine man. It is only in the last quarter of a century that it has entered the realm of practical therapeutics and even today it is apt to receive scant attention in many quarters. It is a curious fact that most of the pioneers in this field have been Hay Fever sufferers and thus were literally driven to the investigation of the disease.

History

Asthma has been recognized and well described by many since ancient times but although there is little doubt that Hay Fever also existed throughout history it was not described or recognized as a definite entity until it was first described by Bostock in 1819. Bostock, a prominent English physician, was associated with Bright in his work on Nephritis and as might be expected his descriptions were excellent and could hardly be improved upon today. Further, because he was widely respected, his ideas on the subject were accepted without question and as he did no practical investigation on the problem his pronouncements were accepted though wrong and probably retarded development of knowledge in the field. He ridiculed, without investigation, the popular notion that it was due to the "effluvium of new hay" and blamed it chiefly on sunlight because of course he was always better off in-doors. However, he deserves credit for his splendid description and recognition of the syndrome and at least in descriptive matter he was a worthy associate of Bright.

Forty years later (1859) Blackley, another English physician and also a sufferer, started his classical investigations which lasted 21 years. He proved beyond all question that his own symptoms (he was his own and only guinea pig) were due to certain species of grass pollen borne to his respiratory tract by the wind. He learnt, by chance, that the pollen which caused his symptoms when rubbed into a scratch on his arm raised an urticarial wheal but that other pollen did not do this. That is, he discovered the scratch test and also showed that the disease was constitutional and not confined to the upper respiratory tract. He even experimented with weak solutions injected into the skin and thus originated the intradermal test. He also studied the pollen content of the air and published the first pollen graph (1866).

It is interesting to note too that he attempted to study the height to which pollen might reach in the air by means of ingenious slides attached to balloons and thus anticipated by almost half a century similar studies from aeroplanes. I was interested to find in the rotogravure section of a Chicago paper recently the pictures of pollen studies carried out by Dr. O. C. Durham of the Abbott Laboratories through the agency of the modern aeroplane—two generations later.

When Blackley died in 1900 he had done a colossal amount of original work to which very little has been added since, but apart from experimenting with and condemning current medicinal aids, he died without offering any method of effective treatment other than the cryptic advice to take a long sea voyage or go to the mountains during the height of one's season. About this time Dr. Oliver Wendell Holmes told the Reverend Henry Ward Beecher—a Hay Fever sufferer too—that the only satisfactory remedy was gravel—eight feet deep.

It is a curious fact that Blackley's important work went practically unnoticed for very many years and it has been supposed that Pasteur's work on the bacterial origin of disease with its challenge and promise served to deflect medical interest from what seemed an unimportant disease. Some even tried to demonstrate a bacterial explanation of Hay Fever and the great physicist von Helmholtz actually published results of a study of hay fever secretions in which he thought he had demonstrated vibrios—thus a great man by stepping out of his own field managed to throw a further obstacle in the path of progress.

In 1902, Dunbar, working in Germany, tried to give a hypodermic dose of pollen extract to one of his pupils, Prausnitz, but the results were so terrifying that he permanently abandoned the idea and it lay dormant for another ten years. Following the current vogue for anti-toxins he tried to make a pollen anti-toxin with horse serum and thinking that he was getting satisfactory results marketed the serum under the name of "Pollantin." This in turn was widely accepted for a short time only to be found worthless and finally condemned.

Nature of Pollen Disease

In 1910-1911 Dr. Noon in England, Dr. Koessler in Chicago, and Dr. Lowdermilk of Kansas in-

* Presented at a meeting of the Winnipeg Medical Society on January 20th, 1939.

dependently showed Hay Fever could be satisfactorily prevented by the pre-seasonal administration of carefully measured minute doses of aqueous pollen extract and gradually increasing them as the patient's tolerance increased. Since then the method has been widely accepted and proven beyond reasonable doubt. But to this day little knowledge has been gained of the mechanism of pollen sensitivity unless Code's recent work on blood Histamine will throw some light on the problem.

Histamine explanation—Lewis & Dale about 1927 advanced the theory — based on experimental observations—that the reaction of the allergen on the reagin of the "shock tissues" of the body produced Histamine or a Histamine-like substance. In 1937 Haworth & MacDonald showed that workers in a cotton factory who were suffering from "stripper's asthma", had a blood histamine about double that found in normal people. Later in the same year Code & MacDonald demonstrated that the blood Histamine was present only in the granular series of white cells and probably all in the eosinophils — the often noted fact that eosinophilia occurs in allergic disease—at least in its active phases—may be noteworthy. Further Code has modified and greatly improved the methods of blood histamine analysis and has shown quite definitely that the histamine-like substance of blood can be crystallized out as pure histamine. Thus one may hope that these various contributions to our knowledge will help to elucidate the allergic problem and possibly produce new methods of attack. (Histamine has been used therapeutically in scattered instances for several years particularly in urticaria with some apparent success).

The only other advance of importance since 1910-1914 has been the discovery of the Prausnitz-Kustner reaction. If the blood serum of an allergic person is injected intradermally into a non-allergic person, the area of skin so treated becomes sensitive to the same allergen as that affecting the patient and remains so for some days and finally disappears. This is known as passive transfer of sensitivity. This reaction of course adds further proof of the constitutional nature of pollen and other allergic disease and it is also of some occasional practical use in diagnosis.

Seasonal Hay Fever and its relative seasonal asthma have been conclusively shown to be constitutional diseases due chiefly to pollen reaching the patient through the air and occasionally to such other air borne allergens as fungous spores, parts of insect, etc. The offending pollen must of course reach the patient's respiratory tract to cause trouble, and the only way in which it can constantly do so is by means of the respired air. That is, the only pollen that is really important to these patients is wind-borne pollen, or as the botanists call it, anemophilous pollen.

Van Leeuwenhoek in his wide microscopic studies first described pollen grains, and it is interesting to note that the best botanical pollen studies originated in the 17th and 18th centuries long before its association with human ailments was suspected. Pollen grains are microscopic bodies varying upwards from about 20 mu (3x rbc) and are characteristic in appearance; the genus and frequently the species can be identified under the microscope. The pollen grain is the male fertilizing unit of plants and it must reach the pistil or female receptive unit for fertilization to occur.

In general, pollenation occurs in one of three main ways. The stamen, producing the pollen, may exist on the same plant as the pistil and pollenation is largely a matter of contiguity; in the brightly flowering plants it is moderately heavy and sticky and is carried mostly by insects, and finally there is the large group of plants (anemophilous by name) which produce large amounts of very light small pollen grains which are carried by the wind—often great distances—to the pistils of others. Obviously then the only pollen that is likely to reach the patient is that carried by the wind. Thus, the rose, goldenrod, daisy and dandelion with their bright flowers long accused of causing Hay Fever are really and necessarily innocent. It is astonishing how difficult it is to get patients and sometimes doctors to realize that these bright and conspicuous flowers are not responsible for their trouble. They do not see or recognize the inconspicuous grass or weed flower producing its clouds of poisonous pollen. Pollen grains have been shown to be capable of travelling many hundreds of miles and to reach a height of at least 10,000 feet in the air. Thus the much publicized local weed clearing projects designed as a public health measure are not likely to help much. Besides one would hardly recommend an attempt to eradicate all grasses and trees because their pollen causes Hay Fever.

Pollen Disease in Manitoba and the Prairies

The problem of pollen disease in any particular region is largely one of learning what pollens occur there, when they occur and in what amounts. In many large areas on this continent extensive pollen surveys have been carried out and the management of pollen cases in such areas is thus made very accurate and is much simplified. No complete study has ever been made in Manitoba or the prairie provinces as far as I am aware other than a ragweed count in Winnipeg by Durham and occasional brief botanical surveys by commercial drug houses. We have been obliged to base local practice on experience elsewhere (e.g., Minnesota) with some fragmentary knowledge of the local flora producing wind borne pollen. A pollen study was commenced here in 1938 with assistance from the Banting Research Foundation. We hope in about a year to be able to present some accurate data on local pollen conditions. Some of the wild statements in commercial literature may then be properly assessed.

I am unable to advance any theories as to the prevalence of pollen disease in Manitoba but think that it is not likely to be much different from the north central states of the U.S.A. However, I hope in presenting a report of my experience in 111 cases to throw some light on the problem.

Although pollen undoubtedly causes most seasonal allergic manifestations we also know that other particles carried in the air such as fungous spores, rust spores, insect debris, etc., also do so in some cases. (Dr. F. T. Cadham in 1924 reported the first three rust spore asthma cases on record). However, all patients that I have examined with seasonal manifestations I have labelled as "pollen disease" fully realizing that some may not be. Accordingly I have skin tested all of them with all the pollens I had reason to suspect and in addition I have also tested them to a list of miscellaneous inhalants which, of course, are not necessarily seasonal but may be accessory factors and which would have to be dealt with to give satisfactory results.

TABLE I.

1. Box Elder (Man. Maple)
2. Common Hazel
3. Canoe Birch
4. Poplar
5. Pussy Willow
6. Cottonwood
7. American Elm
8. Stinging Nettle
9. Pennsylvania Sedge
10. Long-beaked Sge.
11. Great Bulrush
12. Cat Tail
13. Green Ash
14. Black Ash
15. Bur Oak
16. Sweet Vernal Gr.
17. Timothy
18. Red Top
19. June Grass
20. Canada Blue Gr.
21. Annual Blue Gr.
22. Rye (cult.)
23. Quack Grass
24. Ryegrass
25. Corn
26. Barnyard Grass
27. Sorghum
28. Brome
29. Rib Grass
30. Common Plantain
31. Sheep Sorrel
32. Curled Dock
33. Alfalfa
34. Sweet Clover
35. Common Pigweed
36. Tumbleweed
37. Russian Thistle
38. Lamb's Quarters
39. Goosefoot
40. Burning Bush
41. Saltweed
42. Prairie Sage
43. Pasture Sage
44. Common Mugwort
45. Dragon Sage
46. Western Ragweed
47. Giant Ragweed
48. Common Ragweed
49. Marsh Elder
50. Cocklebur
51. Dandelion

TABLE I. shows the pollens which were used in routine testing.

TABLE II. — *Miscellaneous Inhalants*

1. Cat Hair
2. Cattle Hair
3. Dog Hair
4. Horse Hair
5. Sheep's Wool
6. Camel Hair
7. Goat Hair
8. Hog Hair
9. Rabbit Hair
10. Chicken Feathers
11. Duck Feathers
12. Goose Feathers
13. Turkey Feathers
14. Orris Root
15. Henna
16. Tragacanth
17. Cotton Seed
18. Kapok
19. Linseed
20. Silk
21. Rayon
22. Cotton Linters
23. House Dust (stock)
24. Alternaria
25. Aspergillus gl.
26. Aspergillus fum.
27. Aspergillus niger.
28. Penicillium exp.
29. Rhizopus nigricans
30. Staphylococcus Albus
31. Staphylococcus aureus
32. Streptococcus hem.
33. Micrococcus catarrh
34. Pneumococcus
35. Yeast
36. Fish Glue
37. Pyrethrum
38. Lycopodium
39. Tobacco
40. Canary Feathers
41. Parrot Feathers
42. Pheasant Feathers
43. Pigeon Feathers
44. Fox Hair
45. Mink
46. Muskrat
47. Racoon
48. Skunk
49. Squirrel

TABLE II. shows the miscellaneous inhalants used in routine testing.

Pollen Chart — Reactions

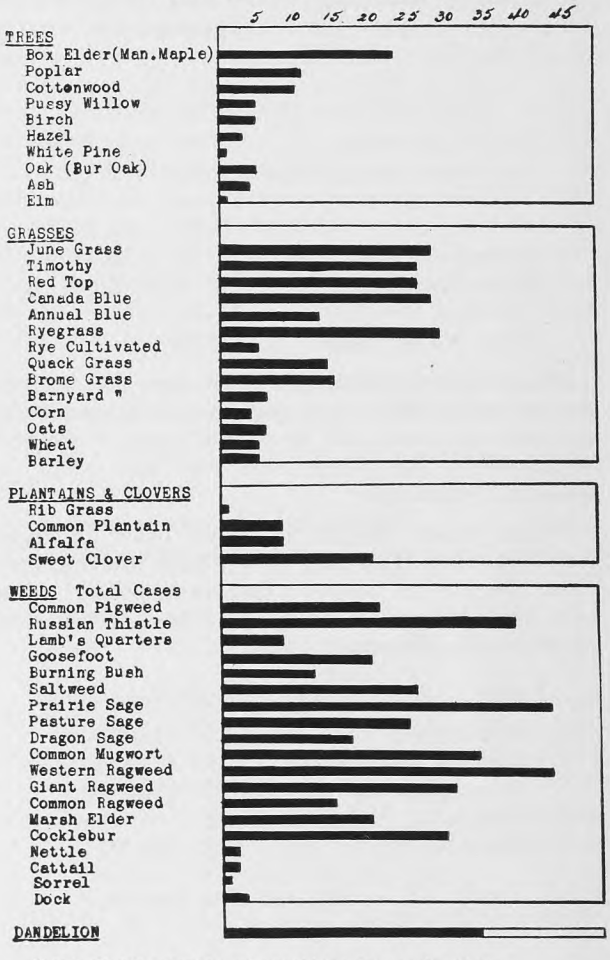

Chart showing number of reactions for each pollen.

The chart shows graphically the number of positive skin tests obtained with each pollen tested but it does not follow that they are all equally important or that the list includes all the possible offending pollens.

TABLE III. — *Non-Pollen Factors*

Allergen	No. of times a factor
Rust Spores	
Crown rust of oats	1
Leaf rust of wheat	1
Stem rust of wheat	1
Hairs and Dander	
Rabbit Hair	1
Horse	7
Dog	6
Cat	8
Feathers	
Goose	5
Duck	4
Chicken	4
Canary	2
Orris Root	7
Pyrethrum	6
Glue	2
Tobacco	2
Textiles	2
Foods	
Barley	2
Rice	2
Wheat	3
Egg	2
Pork	1
Chocolate	1

My experience is that Hay Fever patients are exceedingly grateful for any relief they can get but this is not the only reason for attempting to solve their problem. My next table shows that many of these patients have asthma and as this often becomes perennial and then much more refractory to treatment the treatment of Hay Fever may justly be looked upon as a most important prophylactic measure for asthma. It is estimated by many authorities that about 50% of all Hay Fever patients will develop some degree of asthma if not treated.

TABLE IV. — *Analysis of Cases*

Hay Fever (only)	54	(48.7%)
Hay Fever and Asthma	43	(38.7%)
	97	(87.4%)
Asthma (only)	11	(10.4%)
Pollen Dermatitis	3	(2.6%)
Total Pollen Cases	111	

My method of testing was to use the scratch method and if these were negative the intradermal method was used and in a few cases it proved invaluable. The patch test was also used in seasonal dermatitis.

Pollen cases frequently have other allergic manifestations than Hay Fever and Asthma, and these are due to factors other than pollen. The next table shows an analysis of these associated conditions in my small series.

TABLE V. — *Associated Allergic Conditions*

Urticaria	21	(18.9%)
Eczema	8	(7.2%)
Dermatitis	7	(6.3%)
Others	2	
None	73	(65.7%)

TABLE VI. — *Age and Sex Incidence*

Sex Incidence

Females	57
Males	54
	111

Age Incidence

at Consultation		Years	at Onset
0		0-4	5
9	9	5-9	20
10		10-14	11
13	23	15-19	18
	29	20-29	30
	27	30-39	18
	13	40-49	7
	10	50 & over	2
	111		111

Sex is usually evenly distributed in published series and also in mine. Age is important. The disease may develop at any age but seems to be more troublesome in the very young. Furthermore, the stronger the hereditary history the more likely that trouble will develop early in life. A curious observation is that boys often seem to improve after puberty and girls seem to get worse.

It has been repeatedly shown that the allergic diathesis is hereditary and there is strong evidence that it is transmitted as a dominant Mendelian character. It is only the allergic tendency that is inherited and the offspring do not necessarily exhibit the same form of allergic disease as the parents. The eliciting of a positive family history is very valuable in making a diagnosis and if it is absent, particularly in the young, one should reconsider the diagnosis. It has also been repeatedly shown that when heredity is bilateral the children are apt to show symptoms in the first decade of life, and on the other hand, patients with no detectable family history usually have their onset of symptoms well on in adult life.

TABLE VII. — *Heredity*

Bilateral	23	(20.9%)	
Unilateral	49	(43.6%)	64.5%
None elicited	39	(35.5%)	
Total	111		

1,440 *normal* people only 6.4% had an allergic heredity.
3,139 *allergic* patients showed an heredity factor in 49.4%.
588 *allergic* children showed an allergic heredity factor in 58.1%.
"Tuft"

The seasons have been variously described—for example Spring, Summer and Fall, etc., but because of the small size of my group and their indefinite groupings I have classified them more simply.

TABLE VIII. — *Seasons*

Early Summer	49
Late Summer	50
Whole Summer	12
	111

No. with some perennial symptoms 20.
Duration of symptoms varied from one to twenty-eight seasons.

Note: Tendency to become perennial—common experience elsewhere.

Treatment and Results

All these considerations may be of great academic interest and of some practical interest but the thing that you will naturally be most interested in is the result of treatment. Tuft says that the uncomplicated pollen cases of Asthma and Hay Fever should have practically complete relief of symptoms — when adequately treated — in at least 85% of cases; that failure in ten of the

remaining 15% is probably due to inadequate etiological diagnosis and that 5% will probably prove refractory to either diagnostic procedures or treatment. The treatment of pollen or summer dematitis is, of course, not nearly as satisfactory. Ellis of Minnesota thinks that one should obtain good results in at least 95% of cases—and says they do in Minnesota. In this connection I might remark that Minnesota's study of pollen is one of the most complete on the continent.

In all those in whom a diagnosis of pollen sensitivity was made I advised desensitization. The method used was that usually employed. Small doses of exceedingly dilute pollen extract were administered hypodermically and gradually increased using less dilute solutions until the patient was getting half a cubic centimeter of the most concentrated solution (i.e., an approx. 1% soln.). When this dose was reached it was continued at intervals of about one week to the end of the season and if the patient followed my advice to continue treatment throughout the year this dose was given at intervals of three to four weeks until the following season when the interval was reduced to once weekly. As most patients were sensitive to a variety of pollens I used mixed extracts prepared in accordance with their tests and with my experience in their relative importance. It was found in most cases of those who discontinued treatment at the end of their season that when it was started again next Spring they were required to go back to the most dilute solution and be built up through successive and increasing doses as in the previous year—although they usually did not react quite so briskly as before. The advantage of perennial treatment was that an occasional injection kept the patient's protection high and did not require numerous injections before the next season. Further the best results occurred in the perennially treated cases. Seasonal treatment was most difficult due to the fact that the patient was getting pollen in the air as well as hypodermically and, therefore, doses have to be increased very carefully and the patient carefully watched for severe reactions. Even with this trouble the patients are usually grateful for the relief they get.

TABLE IX. — *Results*

A. *Treatment by Pollen Desensitization.*

1. Reported Cases:		
51% Complete relief reported (9 had asthma)	30	cases
33% Good relief with minor symptoms (9 had asthma)	19	"
12% Slight to moderate relief (4 had asthma)	7	"
Summer Dermatitis with only moderate relief	2	"
Total treated and reported cases	58	"
Insufficient treatment to date	15	"
2. No reports	8	
	81	

In this series of 111 cases only 81 were treated by pollen desensitization. Of these I was unable to obtain reports from 8, and 15 had started treatment so recently that results could not be evaluated. Of fifty-eight adequately treated and reported cases two were cases of pollen dermatitis in which the results were not particularly satisfactory although both patients feel that they have been benefited and I think would do better if they were able to leave their farms—at least temporarily. This leaves a total of 56 adequately treated and reported cases. Of these 30 or 51% reported complete relief and it is gratifying to note that 9 of these were asthmatics. Nineteen cases or 33% reported good relief with only minor symptoms at intervals throughout their season and 9 of these were asthmatics. There were seven cases or 12%, of whom 4 were asthmatics, reporting very slight or poor relief. I think that these results compare quite favourably with those mentioned above and as knowledge of local conditions improves one might anticipate better results.

Of the 30 cases reporting complete relief all had had an adequate course of pre-seasonal treatment.

Of the 19 cases reporting good relief with only minor symptoms:

8 had pre-seasonal treatment.
2 had pre-seasonal treatment starting very late.
5 had seasonal treatment only.
2 were complicated by orris root sensitivity. (i.e. cosmetics)
1 asthmatic gave negative scratch tests and was only diagnosed by means of the intradermal technique and started treatment late but still with quite good results.
1 had good hay fever relief but less asthma relief. I expect that further and prolonged treatment will improve this patient.

Of the seven cases reporting moderate to poor results:

5 had adequate pre-seasonal treatment.
1 started treatment in middle of season.
1 was complicated by a summer dermatitis.

I think that these results indicate the desirability of pre-seasonal treatment. However, seasonal treatment, when necessary, offers a good deal of help.

TABLE X. — *Results*

B. *Not desensitized.*

Partially improved on Nitrohydrochloric Acid	1	case
Improved on removing cat	1	"
Improved by travel; one to North and one to B.C.	2	cases
Not tested	4	"
Undiagnosed (negative tests)	10	"
Diagnosed but not treated	12	"
	30	

This table indicates briefly what happened to the remaining 30 untreated cases. In ten of these I was unable to make a diagnosis (i.e. 11%). It seems to me that this is too high a proportion of failures and I think it indicates the necessity of further study of the problem of air borne pollen and other allergens in this area. The rest of the table is self explanatory. The result obtained by one patient who obtained considerable relief by disposing of her cat is interesting because she was also pollen sensitive but did not have cat symptoms out of the pollen season. Apparently she suffered from a summation of the two causes and the removal of one therefore helped. However, another season may give her trouble and desensitization may still be required.

Summary

1. A short history of pollen disease and its importance has been presented.
2. The necessity of making further pollen studies has been noted and such study is now under way. We hope that this work will not only increase accuracy in diagnosis but improve treatment. Another likely result should be that testing will be simplified and therefore the method can be applied more economically and widely.
3. 111 pollen cases are summarized and results of treatment in 58 reported cases are analyzed.
4. The importance of Hay Fever is emphasized particularly in regard to its relation to asthma.
5. Modern methods of treatment when based on a correct etiological diagnosis give very satisfactory seasonal results but unfortunately treatment must be continued for many seasons and clinical cures are not common unless treatment is given for several years.

In conclusion I would like to express my appreciation of the assistance and kindly encouragement given me by Dr. Daniel Nicholson and to acknowledge the excellent co-operation given by Dr. Margaret G. Dudley who has been of great assistance in the botanical part of the work.

NOTICE

Practice available Hyas, Saskatchewan. For information write to Mr. P. Kukura, Secretary, Hyas and District Board of Trade, Hyas, Sask.

DOCTOR WANTED

Porcupine Plain, Sask., for information write to Mrs. Eva McKee, Porcupine Plain, Sask.

Special Articles and Association Notes

The Manitoba Medical Association Review

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The Resuscitation of the Apparently Drowned*

The season is now approaching when we shall be again confronted with a distressing series of drowning accidents. Much attention has been directed to the automobile accident; not so much to the drowning accident. In the matter of prevention the human element has to be considered in both. Ignorance, carelessness, foolhardiness, physical ailment, all play their parts, and, human nature being what it is, it is hardly likely that these factors can be eliminated to any appreciable extent. This leaves us with the question as to what can be done to save life in the face of a potential drowning case. Here the doctor and the first-aid worker come into the picture. It is essential that both of them should be conversant with the latest and best ideas that have been developed.

It is safe to say that the first thought of the life-saving worker is to initiate artificial respiration. So far, so good, but is sufficient thought given to the details of this procedure, attention or inattention to which will make all the difference in the result? Again, is artificial respiration carried out long enough? A common practice is to continue the procedure for an hour or two and then if the heart sounds cannot be heard with the stethoscope to pronounce the patient dead. This we submit is rather perfunctory. There is excellent authority for the statement that artificial respiration should be carried out for many hours if need be, and not discontinued *until rigor mortis has set in.*

This most important subject was brought to the attention of our Association at the annual meeting in June, last year, when Dr. Gordon Bates, of Toronto, gave an earnest and arresting address which immediately went home. At a meeting of the incoming Executive, held a day or two after, the following resolution was passed—

> "Whereas it has been brought to the attention of this Association that methods of resuscitation in cases of apparent death from drowning, electrical shock, carbon monoxide poisoning and other conditions are often inadequate and are given at a time when there is still a chance of recovery: And whereas there is evidence that long-continued resuscitation will produce a larger percentage of recoveries:
>
> "Therefore be it resolved that a summary of this evidence be published in the *Journal* as soon as possible, and be transmitted to all Divisions and Branches of this Association in order to give the subject widest publicity among the medical profession."

In conformity with the spirit of this instruction the *Journal* published in its August issue a paper by Drs. Bates, Gaby and MacLachlan, members of the Committee on Artificial Respiration, Health League of Canada, which developed the matter farther.[1] This paper is a plea for the more prolonged application of resuscitation measures, and endorses the recommendation that if restoration is not quickly effected artificial respiration should be kept up until rigor mortis sets in. Rigor mortis is the most convincing proof that death has ensued; the stethoscope is *not reliable* in these cases. The authors make the remarkable statement that "It is possible for a person to have been under water for up to half an hour and still live." Three instances are cited. The lesson is obvious.

And now comes a paper, also of first-class importance, dealing with the experimental side of the subject.[2] It appears in this issue of the *Journal* and deserves the attention of all our readers. Coming from workers at the Banting Institute, it is authoritative. Such subjects as the respiratory and swallowing reflexes, reflex laryngeal spasm, blood pressure, CO_2 content of the blood, the condition of the heart, lungs and stomach post mortem are subjects dealt with scientifically; also, the possible curative effects of various drugs and mechanical procedures.

* Reprinted from The Canadian Medical Association Journal, 40, 487-488, 1939, by kind permission of the Editor.

These authors conclude as follows. "As a result of our experiments we consider that *prompt, adequate* and *prolonged* artificial respiration is the fundamental treatment for drowned, asphyxiated or electrocuted persons." The italics are ours. Every adjective deserves close consideration.

It may be added that in the case of artificial respiration manoevres seconds count. To interrupt the movements even momentarily may spell failure. The mouth and air passages should be cleared as far as possible of foreign matter, and to ensure a free passage for the air on account of the laryngeal spasm so frequently present, a semi-rigid tube should be passed through the larynx. The body should be placed in a semi-prone position, with the head turned to one side and somewhat lower than the rest of the body. Appropriate resuscitation exercises should then be instituted.

Lougheed, Janes and Hall have tried a number of drugs, including adrenalin, nicotine, amyl nitrite, and the mixture of CO_2 and O_2 known as carbogen, for the resuscitation of drowning animals. They think that carbogen is very valuable. The only other agent that need be used is amyl nitrite, which may be given from "perles" and administered during the inspiratory phase of the artificial respiration movements. Adrenalin appears to be positively dangerous.

Such studies as these are of the utmost value, and we may confidently expect that strict attention to the lesson of the findings will result in the saving of many more lives in the future.

A.G.N.

1. Bates, G., Gaby, R. E. and MacLachlan, W.: The need for prolonged artificial respiration in drowning, asphyxiation and electric shock, Canad. M. Ass. J., 1938, 39: 120.
2. Lougheed, D. W., Janes, J. M. and Hall, G. E.: Physiological studies in experimental asphyxia and drowning, Canad. M. Ass. J., 1939, 40: 423.

Meeting of Executive Committee

Minutes of a Special Meeting of the Winnipeg members of the Executive Committee of the Manitoba Medical Association held in the Medical Arts Club on Tuesday, May 2nd, 1939, at 6.30 p.m.

Present.

Dr. W. E. Campbell	Dr. S. G. Herbert
Vice-President	Dr. E. W. Stewart
(Chairman)	Dr. C. E. Corrigan
Dr. C. W. Burns	Dr. O. J. Day
Dr. Geo. Brock	Dr. C. W. MacCharles.

The Chairman explained that the meeting had been called for the purpose of dealing with some items of business that had been left over from the last full meeting of the Executive Committee.

Business Arising Out of the Minutes and Unfinished Business

Federation.

The secretary reported that as instructed at the meeting of the Executive Committee on January 17th, 1939, he had written to the Chairman of the Committee on Constitution and By-Laws of the Canadian Medical Association, to advise him of the report of the Committee on Federation of the Manitoba Medical Association which was adopted by the Executive Committee. In reply he had received a letter from Dr. Harris asking if it would be satisfactory if he were to carry on correspondence with Dr. McKenty's Committee to see if some satisfactory compromise could be arrived at. The secretary had replied on April 6th that it was the intention of the Executive Committee of the Manitoba Medical Association that this discussion should be continued.

It was moved by Dr. S. G. Herbert, seconded by Dr. C. E. Corrigan: THAT the secretary's letter be approved. —Carried.

Letter from Dr. Strong
Re Compensation Cases.

The secretary stated that the Special Committee appointed to deal with this matter had made a report and had suggested that Dr. Strong be asked to express his opinion on this report. He had written to Dr. Strong asking him for his comments on the report, but to date no reply had been received.

It was decided that the secretary should be instructed to communicate with Dr. Strong again and that the matter be left over for the next regular meeting of the Executive Committee.

Milk Depot.

The question of the investigation of the Milk Depot had been raised by Dr. Gordon Chown at the Annual Meeting of the Manitoba Medical Association.

After considerable discussion it was moved by Dr. C. E. Corrigan, seconded by Dr. E. W. Stewart: THAT the Vice-President should appoint a Special Committee to investigate the operations of the Milk Depot and report to the Executive Committee. —Carried.

The Vice-President then named the following a Committee to deal with this matter:

Dr. W. F. Tisdale	Dr. O. J. Day
(Chairman)	Dr. S. A. Boyd.

Berlo School.

This correspondence with regard to examination of children at this school was discussed in some detail, and it was finally moved by Dr. C. E. Corrigan, seconded by Dr. Geo. Brock: THAT it be ascertained if any arrangements had been made for a clinic at this school, and if not, the secretary be instructed to advise the sister in charge of the school that arrangements for such a clinic are

the responsibility of the municipal authorities, as this is an organized district. —Carried.

Relief Cases in Unorganized Territories.

The secretary reported that in November he had been instructed to secure from the Department of Health a record of the scale of fees paid for medical care of citizens on relief in unorganized territories. A record of this scale of fees had been furnished by the Deputy Minister.

The secretary also read a letter from Dr. Peacock of Roblin citing an instance where in view of the type of travelling required in attending a particular case, the actual fee paid for services was very small.

A motion was passed instructing the secretary to secure further information.

Hospital Aid Act.

The secretary reviewed the minutes and correspondence with regard to this problem, including a letter signed by the Hon. Minister of Health which was sent to the medical officers of health, secretary-treasurers of municipalities and Reeves and Mayors of Municipalities on October 7th, 1937.

The problem chiefly involved was with regard to sending in to public wards of hospitals patients who should be able to pay the regular hospital charges, and also medical fees.

Dr. Burns reported that at the last annual meeting of the Manitoba Hospital Association he had brought this matter to the attention of the delegates.

It was suggested that when patients apply for accommodation in the public wards that it might be possible to have a form available which they should sign, stating that they were unable to pay the regular cost of hospital accommodation or medical fees.

A motion was passed instructing the secretary to secure further information with regard to this suggestion.

Representative on Workmen's Compensation Referee Board.

The secretary read a letter from the Assistant Commissioner of the Workmen's Compensation Board dated February 24th, 1939, asking the Manitoba Medical Association to suggest the name of a medical man to act as Chairman of the Medical Appeal Board. This had been considered at a special meeting of the officers on March 3rd, 1939, and it was decided to suggest the name of Dr. J. A. Gunn. A letter to this effect had been sent to the Workmen's Compensation Board under date of March 3rd.

The Assistant Commissioner had also requested that a name should be suggested for the office of Vice-Chairman and that a panel of names for the third member of the Medical Appeal Board should also be forwarded. At the special meeting of the officers it was decided to defer action until the meeting of the Executive Committee.

The secretary pointed out that the arrangements entered into between the Workmen's Compensation Board and the Manitoba Medical Association in 1934 had never been strictly adhered to as the Manitoba Medical Association had failed to forward names for the various offices each year.

It was moved by Dr. Geo. Brock, seconded by Dr. E. W. Stewart: THAT the secretary and the treasurer interview the Commissioner or Chief Medical Officer of the Workmen's Compensation Board and discuss with him the most suitable arrangements for the Medical Appeal Board particularly as to whether or not the chairmanship should be changed each year as suggested in the original agreement in 1934. —Carried.

The treasurer and the secretary were also instructed to submit to the next meeting a tentative list of names for the Medical Appeal Board of the Workmen's Compensation Board.

Dr. Davidson's Research Work.

The secretary reviewed the minutes and correspondence with regard to this problem.

It was moved by Dr. C. E. Corrigan, seconded by Dr. C. W. Burns:

THAT this correspondence be referred to the Medical Research Committee of the University of Manitoba, and

THAT the Winnipeg Medical Society and the Honorary Attending Staff of the St. Joseph's Hospital should be advised of this action.

—Carried.

King George V Silver Jubilee Cancer Fund.

The secretary read a letter from Dr. Routley, secretary of the Canadian Medical Association, dated November 17th, 1938.

It was moved by Dr. C. W. Burns, seconded by Dr. Geo. Brock: THAT this letter be filed.

—Carried.

Appointment of Representatives of Cancer Relief and Research Institute.

At a special meeting of the officers held on March 3rd, 1939, the question of the appointment of representatives from the Manitoba Medical Association to the Cancer Relief and Research Institute, had been discussed. The original appointments from the Manitoba Medical Association had been made on January 10th, 1936. Three names had been submitted with one appointment for three years, one for two years and one for one year. Consideration of the Cancer Relief Act suggested that all appointments might have to be for three years. On examining the correspondence, it was found that there was no record of any appointments having been made subsequent to June 10th, 1936.

It was moved by Dr. C. W. Burns, seconded by Dr. S. G. Herbert: THAT the secretary be instructed to ascertain the names of the members of the Board, the organizations by whom they

had been appointed, and if the appointments could be made for less than three years, or if all appointments were required to run for three years. —Carried.

Letter from Dr. Ross of the Sanatorium Board of Manitoba.

The secretary read a letter from Dr. Ross under date of January 10th, 1939, in which Dr. Ross asked if it would be possible for a group of physicians to form a division of the Manitoba Medical Association for the study of tuberculosis.

It was moved by Dr. O. J. Day, seconded by Dr. S. G. Herbert: THAT the secretary be instructed to write to Dr. Ross quoting Article 3 of the constitution, and also that he obtain copies of the constitution and by-laws of the older provincial association so that a study of this might be made with a view to revision of the constitution of the Manitoba Medical Association. —Carried.

Canadian Medical Association Senior Members.

At the meeting of the Executive Committee on January 17th a committee consisting of the secretary and Dr. Ross Mitchell had been appointed to select the names to be suggested to the Canadian Medical Association for senior membership, as requested in a letter from Dr. Routley dated November 18th.

The secretary reported on the recommendations made by the special committee.

It was moved by Dr. C. W. Burns, seconded by Dr. E. W. Stewart: THAT the names suggested by this Special Committee be approved. —Carried.

Special Liason Committee Re Hospital Problems.

The secretary reviewed the correspondence with regard to the suggestion of Dr. Harvey Agnew that a Liason Committee between existing organizations be formed to discuss hospital problems. He advised that this had been discussed at a special meeting of the officers held in March and that a letter had been sent to Dr. Agnew giving tentative approval of the Manitoba Medical Association to this suggestion.

It was moved by Dr. O. J. Day, seconded by Dr. S. G. Herbert: THAT the action of the officers and the correspondence be approved, and that Dr. Ross Mitchell be appointed a delegate to the meeting of this Committee. —Carried.

Letter from Dr. S. Bardal.

The secretary read a letter from Dr. Bardal suggesting that a member of the Executive Committee of the Manitoba Medical Association should be permitted to attend all meetings and conferences called for the purpose of discussing matters pertaining to medical economics.

After discussion it was moved by Dr. C. W. Burns, seconded by Dr. O. J. Day: THAT the secretary be instructed to write to Dr. Bardal stating that the members of the Executive Committee approved of the principle suggested in his letter, and agreed that it would be advisable to ask the approval of the Minister of Health for such an arrangement, but that as Dr. Bardal's letter was open to various interpretations that his suggestion with regard to such a delegate not being a member of the Committee on Sociology be clarified. —Carried.

Tourist and Convention Bureau.

The secretary read a letter from the Tourist and Convention Bureau suggesting that they might invite the Inter-State Post-Graduate Medical Association to hold a meeting in Winnipeg. It was suggested that facilities for such a meeting in Winnipeg might not be adequate, and after considerable discussion it was moved by Dr. C. W. Burns, seconded by Dr. O. J. Day: THAT the secretary be instructed to correspond with the Inter-State Post-Graduate Medical Association and find what their requirements for such a meeting might be, and that the secretary also write to the Tourist and Convention Bureau and advise them of this action. —Carried.

New Business

Medical Meetings in Canada.

The secretary read a letter from the secretary of the Canadian Medical Association under date of March 22nd advising that at a meeting of the Executive Committee of the Canadian Medical Association the following motion was passed:

> "THAT Medical Associations and organizations with head offices outside of Canada, contemplating holding meetings in any Province of Canada, be requested to communicate with the Canadian Medical Association or the appropriate Provincial Medical Association as to the time of meeting, to avoid conflict with meetings of national or provincial bodies."

It was moved by Dr. C. E. Corrigan, seconded by Dr. C. W. Burns: THAT the motion of the Executive Committee of the Canadian Medical Association be approved. —Carried.

Annual Meeting of Canadian Medical Association, Winnipeg, 1941.

The secretary read a letter from the secretary of the Canadian Medical Association advising that the Executive Committee of the Canadian Medical Association had passed the following motion:

> "THAT the annual meeting in Winnipeg in 1941 be held during the week of June 22nd."

Annual Meeting of Manitoba Medical Association.

Motion Pictures: The secretary reported that it had been suggested that medical motion pictures might be a valuable asset for the annual meeting in September. He reported he had been in corres-

pondence with various organizations to find what pictures might be available.

It was moved by Dr. C. W. Burns, seconded by Dr. O. J. Day: THAT this correspondence be referred to the Programme Committee. —Carried.

Exchange of Speakers with British Columbia: The secretary reported that it had been suggested that in addition to the speakers from Eastern Canada it might be an advantage to exchange speakers for the annual meeting between the British Columbia Medical Association and the Manitoba Medical Association, and reviewed the correspondence with regard to this matter.

It was moved by Dr. C. W. Burns, seconded by Dr. O. J. Day: THAT the Committee approve of the suggestion of exchange of speakers between Manitoba and British Columbia for the annual meetings, and that if necessary the expense of one speaker be borne by the Manitoba Medical Association, and that this question should be referred to the Programme Committee. —Carried.

Letter from Dr. Patch.

The secretary read a letter from Dr. Patch, President-Elect of the Canadian Medical Association, expressing his thanks for receipt of the Manitoba Medical *Review,* and advising that he was looking forward with pleasure to attending the meeting of the Manitoba Medical Association.

Physiotherapy.

The secretary reported that a communication had been received from a group of people in which it was stated that a Manitoba Association of Physiotherapists had been formed. The secretary had been in communication with one of the members of this group and was informed that this was a voluntary organization but it was the intention of the group to secure a charter from the provincial government, and the members would welcome the co-operation of the medical profession in forming their organization.

The secretary also reported that he had found out that it had been arranged that the Nurses Central Directory should arrange appointments for the members of this group when requested to do so, and that there was nothing to prevent a lay person arranging directly with the Nurses Central Directory for treatment by one of these physiotherapists. It was pointed out that if this practice were carried out it would mean members of this group would be allowed to carry on medical practice.

It was moved by Dr. Geo. Brock, seconded by Dr. C. E. Corrigan: THAT an Orthopaedic Committee be appointed to investigate this problem and report back to the Executive Committee. —Carried.

The Chairman named the following Committee to act:

Dr. A. P. MacKinnon (Chairman) Dr. George Ryan.

Letter from Dr. C. H. A. Walton Re Pollen Survey.

The secretary read a letter from Dr. Walton under date of March 7th, asking for the support of the Manitoba Medical Association towards securing the co-operation of the Department of Health and the Department of Education to carry on a pollen survey in Manitoba.

It was moved by Dr. S. G. Herbert, seconded by Dr. C. E. Corrigan: THAT this correspondence be referred to the Medical Research Committee of the University of Manitoba. —Carried.

Appointment of Delegates on Canadian Medical Association Council.

The secretary reviewed the correspondence with regard to membership on the Council of the Canadian Medical Association. It was decided to instruct the secretary to secure further information with regard to members of the Manitoba Medical Association who might be attending the annual meeting of the Canadian Medical Association.

Radiological Services in Group Hospitalization Plans.

The secretary read a letter from the secretary-treasurer of the Canadian Association of Radiologists under date of March 13th criticizing the arrangements entered into under some plans of group hospitalization, whereby the services of radiologists were supplied by the hospital concerned.

The secretary was instructed to obtain further information from local radiologists, and that the matter be considered at the next meeting of the Executive Committee.

Letter from Medical Library Association.

The secretary read a letter from the secretary of this association dated March 8th, and it was moved by Dr. Geo. Brock, seconded by Dr. S. G. Herbert: THAT the letter be filed. —Carried.

Letter from Dr. R. D. Ferguson.

A note from Dr. Ferguson was read by the secretary. It was suggested that the question of making life memberships should be brought up at the next annual meeting of the Manitoba Medical Association. It was decided to defer consideration of this problem until the next regular meeting of the Executive Committee.

Letter from Dr. Trimble.

The secretary read a letter from Dr. Trimble suggesting that the northern part of the province might have more representation on the Executive Committee, and his reply.

It was decided that the secretary should communicate with Dr. Trimble again, and that the matter be discussed at an executive meeting.

The meeting then adjourned.

Department of Health and Public Welfare

NEWS ITEMS

THE PREVENTIVE ASPECTS OF VENEREAL DISEASES

In view of the special interest being taken in various parts of the province relative to the prevention of the venereal diseases, the Department thought the following article by Dr. Alfred T. Osgood, Consulting Urologist, Bellevue Hospital, New York City, would be opportune:

"The physical, mental, moral, social and economic damage wrought by syphilis and gonorrhea are matters of general knowledge, and unfortunately the sad personal experience of one or more members of nearly every family in the land. It is scarcely needful here to rehearse the menace to individuals and to the public health of venereal diseases. Statistics, we know, tell only part of the story of their prevalence, with 50,000 new cases of syphilis in New York City, and 500,000 new cases in our country each year, and the conservative estimate of twice as many cases of gonorrhea. How shall we estimate the vast number of those who are unaware of their diseases? The number of those who do not submit to examination, cases incorrectly diagnosed, or the number of those who find diagnosis and treatment in the drug store and from the quack?

"The problem of prevention has been fully recognized by the medical profession, by private, public and governmental health agencies for generations.

"The greatest restriction upon the prevention and control of these diseases up to the present time has been what is designated as 'public opinion.' It has long been maintained that public opinion would not countenance the enforcing of laws to effectively handle this problem in the same way that other communicable diseases have been managed. This great hindrance to effective control in this country is based upon the stigma of moral dereliction implicit in every case, with shielding of the patient by his medical attendant who is bound to preserve professional confidence.

"But gradually a change has been evolving in the minds of the public. With the diffusion of knowledge concerning these diseases and their treatment, a more intelligent attitude toward them has come about. Public opinion now better informed as to what a scourge they are, how they have thrived under concealment, and how they may be treated and controlled, has finally awakened to the importance of strenuous efforts towards restricting them. Within recent years public spirited citizens, welfare workers, district nurses, and some outstanding physicians and other health-servants of this public have aroused a wave of protest against the neglect of these diseases which is assuming tidal proportions. This rapidly growing interest in social hygiene problems is manifest by the very large numbers brought together for the study of this subject on Social Hygiene Day and by the frequent meetings in all parts of this country because of interest in this vital health problem. Legislators have been brought to the point of passing laws concerning them which are making possible definite progress for their limitation. States have passed laws requiring evidence of freedom from syphilis in the case of each party to a marriage contract before the license therefor will be issued. Many who have labored valiantly in years gone by to bring about this changed point of view have passed away, but their influence still prevails and the work that they started is still indefatigably carried on now by individuals and by private and governmental public health forces.

"The achievements in the control of these diseases by the army and navy of the United States during the World War demonstrated what can be accomplished in well controlled bodies of men. Also the brilliant results obtained through recent years in the Scandinavian countries, as well as the good effects of the English plan, have shown that this country has been the laggard in this field of preventive medicine wherein organized, concerted effort can produce results of inestimable value.

"One great stumbling block, however, has been the failure to compel the known source to comply with health regulations, and to compel compliance with directions against its further extension. This seems to be the key to a large part of the problem of prevention. Ways and means must be provided for the continuance of the protection of the victim from publicity and, the strict confidential relation between the physician and his patient must be preserved, but on the other hand, the source of each case of infection must be amenable to law for the protection of the public health, and the ignorant, careless, irresponsible, infectious case must also be made amenable to the police powers of a board of health when that is found to be necessary. This is the method pursued in the case of such diseases as smallpox, the plague, diphtheria, etc., and a method acting with equal force must be devised and applied if these diseases are to be controlled. This is what has been done to effect the reduction of syphilis to a minimum in the compact and well regulated smaller countries such as Denmark and Sweden. The problem, of course, is very much more complex here.

"We have in this country no sweeping epidemics of smallpox, cholera, or bubonic plague. The pest holes where these diseases may originate in this country are isolated, communications are restricted and the public is protected. The time should come when health authorities faced with a focus of any communicable disease will exercise their authority undeviatingly supported by public funds and intelligent public opinion.

"We know enough about syphilis, its prevention and control and its treatment, to limit it enormously, provided the knowledge and the facilities at hand were utilized wisely and to the fullest extent. With regard to gonorrhea there are difficulties which make it less amenable to control. We are at present greatly encouraged by two recent methods of treatment for gonorrhea which offer more promise than any which we have possessed heretofore. These are treatment with sulfanilamide and with hyperthermia. Each of these methods presents important problems for searching scientific investigation before the favorable reports concerning their effects can be placed upon a firm basis. Funds for this purpose should be found. Hyperthermia can be applied to only a few selected cases. It demands hospitalization, careful observation, costly apparatus, prolonged individual attention on the part of the physician and nursing staff, and is not without risk. It is not applicable to the vast number of cases at the present time. Complement fixation test for gonorrhea is, as yet, by no means as reliable as the Wassermann and allied tests for syphilis."

COMMUNICABLE DISEASES REPORTED

Urban and Rural - April, 1939

Occurring in the Municipalities of:

Mumps: Total 149—Winnipeg 132, Kildonan East 6, Unorganized 3, Morris Town 2, Morris Rural 2, Brandon 1, Brokenhead 1, St. James 1, Wawanesa 1.

Influenza: Total 88—Brandon 1, Unorganized 1, Winnipeg 1 (Late Reported: February, Brandon 2,

St. Boniface 2, Birtle Town 1, Montcalm 1, Mossey River 1, Oakland 1, Rockwood 1, Rossburn Rural 1, Turtle Mountain 1; March, Brandon 42, Unorganized 32).

Scarlet Fever: Total 79—Brandon 25, Winnipeg 12, Ste. Rose Municipality 6, Souris Town 5, Unorganized 4, Virden 3, Transcona 3, Thompson 2, Morton 2, Coldwell 1, Cypress North 1, Daly 1, Fort Garry 1, Kildonan East 1, Kildonan West 1, Morris Town 1, Ochre River 1, Saskatchewan 1, Selkirk 1, Shoal Lake Village 1 (Late Reported: March, Portage Rural 4, Souris 1, Wallace 1).

Chickenpox: Total 70—Flin Flon 25, Winnipeg 15, St. Francois Xavier 5, Silver Creek 3, Kildonan East 7, St. Boniface 2, Unorganized 2, Whitewater 2, Brandon 1, La Broquerie 1, Montcalm 1 (Late Reported: February, Unorganized 6).

Whooping Cough: Total 56—Winnipeg 25, Lawrence 10, Kildonan West 6, St. James 5, Unorganized 5, Ethelbert 1, McCreary 1, Swan River Rural 1 (Late Reported: February, Coldwell 1; March, St. Boniface 1).

Lobar Pneumonia: Total 23—Portage City 4, Unorganized 2, Brandon 1, Brokenhead 1 (Late Reported: February, Argyle 1, Brandon 1, Carberry Town 1, Kildonan West 1, Lorne 1, Minitonas 1, Portage City 1, Ritchot 1, St. Anne 1, St. Boniface 1, Transcona 1, Unorganized 1, Wallace 1; March, Unorganized 2).

Smallpox: Total 18—Boulton 8, Dauphin Town 2, Swan River Town 2, Shellmouth 1 (Late Reported: February, Swan River Rural 1; March, Boulton 4).

Measles: Total 14—Morden Town 6, Winnipeg 5, Boissevain 2 (Late Reported: March, Strathcona 1).

Tuberculosis: Total 13—Winnipeg 10, Boulton 1, Morris Rural 1, St. Laurent 1.

Diphtheria: Total 11—Winnipeg 5, Selkirk 3, Argyle 1, St. Boniface 1, The Pas 1.

Erysipelas: Total 8—Winnipeg 6, Brandon 1, Rockwood 1.

German Measles: Total 7—Brandon 2, Rivers 1 (Late Reported: March, Unorganized 4).

Puerperal Fever: Total 2—(Late Reported: February, Binscarth Village 1, Unorganized 1).

Septic Sore Throat: Total 2—Virden 1 (Late Reported: February, Unorganized 1).

Trachoma: Total 1—Rhineland 1.

Typhoid Fever: Total 1—St. Anne 1.

Diphtheria Carriers: Total 1—Flin Flon 1.

Venereal Disease: Total 109—Gonorrhoea 64, Syphilis 45.

REPORTING OF COMMUNICABLE DISEASES

We are quoting herewith extracts received in a letter from Mr. F. J. Russell, Statistician, Dominion Bureau of Statistics at Ottawa, under date of May 11th, 1939.

"At the present time and in the past the comparability of Health Statistics and therefore their value, has been greatly lessened not only by the unequal lengths of the periods for which they are reported, but even because they do not cover the same period of calendar time from year to year. It is considered that a unit should be adopted by all the provinces and that all reports should be made as of this unit or of multiples of same.

"In view of this it is proposed to adopt the week as the unit and to have the reports made as of, 1. The week. 'The four week period; there would be thirteen of these in a year as follows:

1st—	Weeks	Ended	January 7, 14, 21, 28.
2nd—	"	"	February 4, 11, 18, 25.
3rd—	"	"	March 4, 11, 18, 25.
4th—	"	"	April 1, 8, 15, 22.
5th—	"	"	April 29, May 6, 13, 20.
6th—	"	"	May 27, June 3, 10, 17.
7th—	"	"	June 24, July 1, 8, 15.
8th—	"	"	July 22, 29, August 5, 12.
9th—	"	"	August 19, 26, September 2, 9.
10th—	"	"	September 16, 23, 30, October 7.
11th—	"	"	October 14, 21, 28, November 4.
12th—	"	"	November 11, 18, 25, December 2.
13th—	"	"	December 9, 16, 23, 30.

"The 31st day of December would arbitrarily be included in the week ending January 7th making this an eight day week. In Leap Year, the 29th day of February would be included in the week ended March 4th, making this also an eight day week. During 1939 these weekly periods all end on Saturday. At present all but two provinces end their reporting week on each Saturday of the year and they would continue to do so for the remainder of 1939; they would then change their reporting week to end on each Sunday for the weeks of January and February 1940, and because 1940 is a Leap Year, the remainder of the weeks for that year would end on a Monday. The weeks for 1941 would end on Tuesdays, and for 1942 and 1943 on Wednesdays and Thursdays respectively.

"In Manitoba, your week ends on a Friday, it would be necessary for you as soon as convenient to have your week end on Saturday for the remainder of 1939."

In view of this request we are endeavouring to alter our records, and consequently instead of the reports on communicable disease being sent out to cover the calendar months they will cover the four week period as set out in Mr. Russell's letter.

The last four week period ends on May 20th. Thus if this report is to be used in the bulletin there will be some adjustment necessary in reporting the communicable disease in the next issue of the "Manitoba Medical Association Bulletin." The last calendar month that will be used I believe is for the month of April, 1939. In order to straighten the matter out in the next issue it will be necessary to report only for the three week period from May 1st to May 20th and a report for that purpose will be prepared for you separately. —C.R.D.

DEATHS FROM ALL CAUSES IN MANITOBA

For the Month of March, 1939

URBAN—Cancer 57, Influenza 14, Tuberculosis 14, Pneumonia (all forms) 7, Lobar Pneumonia 6, Syphilis 4, Typhoid Fever 1, all others under one year 9, all other causes 159, Stillbirths 13. Total 284.

RURAL—Cancer 29, Influenza 22, Tuberculosis 15, Pneumonia (all forms) 12, Lobar Pneumonia 7, Diphtheria 2, Syphilis 1, Erysipelas 1, all others under one year 29, all other causes 161, Stillbirths 21. Total 300.

INDIAN—Tuberculosis 15, Pneumonia (all forms) 10, Influenza 2, Lobar Pneumonia 2, Syphilis 1, all others under one year 12, all other causes 8. Total 50.

Medical Library
University of Manitoba

The Practitioner — February, 1939

Midwifery and the General Practitioner. By Sir Ewen MacLean, M.D., F.R.C.P., F.C.O.G., Past President of the Royal College of Obstetricians and Gynaecologists; Emeritus Professor of Obstetrics and Gynaecology, Welsh National School of Medicine.

Ante-Natal Care in General Practice. By W. H. F. Oxley, M.R.C.S., F.C.O.G., Honorary Medical Officer and Lecturer in Midwifery, East End Maternity Hospital.

Delayed Labour. By Arnold Walker, M.A., M.B., F.R.C.S., F.C.O.G., Obstetrical Surgeon, City of London Maternity Hospital; Gynaecological Surgeon, Grosvenor Hospital for Women, Miller General Hospital, and Harrow Hospital; Assistant Gynaecological Surgeon, West London Hospital; Member, Central Midwives Board.

The Diagnosis and Treatment of Disproportion. By W. C. W. Nixon, M.D., F.R.C.S., Surgeon to Out-Patients, Soho Hospital for Women; Obstetric Consultant, London County Council; late Professor of Obstetrics and Gynaecology, University of Hong Kong.

The Management of the Puerperium and its Minor Disturbances. By A. H. Davidson, M.D., F.R.C.P.I., F.C.O.G., Master of the Rotunda Hospital, Dublin; Professor of Midwifery, Royal College of Surgeons in Ireland.

The Equipment and Instruments for Midwifery in General Practice. By John Beattie, M.D., F.R.C.S., M.C.O.G., Assistant Physician Accoucheur, St. Bartholomew's Hospital, London.

Diet in Health and Disease: XX.—Breast Feeding. By C. K. J. Hamilton, M.C., B.M., F.R.C.P., Physician-in-charge of Children's Department, Charing Cross Hospital.

Immediate Surgery in Air Raids; Work in a Casualty Clearing Station. By Philip H. Mitchiner, C.B.E., M.D., M.S., F.R.C.S., Honorary Surgeon to H.M. the King; Surgeon to St. Thomas's Hospital.

Decompression of the Bladder. By Hamilton Bailey, F.R.C.S., Surgeon, Royal Northern Hospital; Surgeon and Urologist, Essex County Council.

The Psychological Factor in General Practice. By M. O. Raven, D.M., M.R.C.P., Physician, Ramsgate General Hospital.

Solutions Used in the Injection Treatment of Hernia. By Maurice Lee, M.B., F.R.C.S., Assistant Surgical Officer, Willesden General Hospital.

The Practitioner and His Accounts. By Gordon Lowe.

The British Journal of Urology — March, 1939

Perinephric Abscess. By J. E. Semple, F.R.C.S., Honorary Surgical Registrar, All Saints' Hospital.

A Case of Complicated Extrophy of the Bladder Presenting Many Unusual Features. By K. F. Russell, M.S., Senior Lecturer, Department of Anatomy, University of Melbourne.

Chyluria of Filarial Origin. By P. N. Ray, B.A., M.B., F.R.C.S. (Eng.), Additional Surgeon, Medical College Hospital, Calcutta, and S. Sundar Rao, L.M.P., Filariasis Research Worker, School of Tropical Medicine, Calcutta.

Canadian Public Health Journal — February, 1939

Epidemiology and Etiology of Pneumonia. By A. L. McKay, B.A., M.B., D.P.H., Director, Division of Preventable Diseases Department of Health of Ontario.

Pneumonia in Ontario. By A. Hardisty Sellers, B.A., M.D., D.P.H., Department of Health of Ontario, and Department of Epidemiology and Biometrics, University of Toronto.

Antipneumococcus Rabbit Serum in the Treatment of Pneumonia. By W. P. Warner, M.B., Medical Service, Toronto General Hospital.

The Serum Treatment of Pneumococcal Pneumonia. By H. I. Kinsey, M.B., F.R.C.P.(C.), Toronto.

Age Distribution of the Population in Relation to Mortality. By M. C. MacLean, M.A., Chief, Division of Social Analysis Dominion Bureau of Statistics, Ottawa.

Treatment of Lobar Pneumonia with Antipneumococcus Rabbit Serum. By E. A. Broughton, M.B., St. Michael's Hospital, Toronto.

Further Observations on Brucellosis in and around Vancouver. By C. E. Dolman, Vivienne Hudson and D. G. B. Mathias.
From the Provincial Board of Health, University of British Columbia, and Connaught Laboratories, University of Toronto.

Social Services and Public Health. By Ernest H. Blois, Director of Child Welfare, Mothers' Allowances and Old Age Pensions, Nova Scotia.

OBITUARY

DR. HENRY HERBERT ELLIOTT

Dr. Henry Herbert Elliott, former Commissioner of Manitoba, died at The Pas, Manitoba, on April 24th, in his 67th year. He was born at Bayfield, Ontario; graduated from Queens University in Medicine in 1898; practiced in Seeley's Bay, Ont. till 1912. In that year he came to The Pas to open up the Out-Post Customs Service. In 1918 he went to Emerson in charge of Port Customs; resigned in 1920 and went to Rapid City where he resided till 1925, when he was appointed Commissioner to Northern Manitoba.